

# **GREEN RESILIENCE PROJECT COMMUNITY SUMMARY #2**



Lockeport, Nova Scotia

Submitted on 11 December 2021 by



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## A. Introduction

### 1. Summary

*100-150 words that highlight the key takeaways from the Community Summary Report. Were there any issues, concerns, solutions or ideas that were talked about in multiple breakout groups and/or were strong themes in discussion of the full group? Did any general points of consensus emerge from the group?*

This report presents highlights of the discussion held with students from Lockeport Regional High School on Wednesday, December 1, 2021. It is the second of two reports, with the first report presenting highlights from discussions with 35 adult residents of Lockeport (23 in person, 12 via Zoom).

The key takeaways and themes that emerged from the conversations were:

Lockeport's youth are highly capable of engaging in the conversation to assess the Town's situation vis a vis the unfolding climate crisis, and to generate new and novel solutions. With minimal preparation, they were able to engage in a nuanced discussion of the challenges and opportunities, and conveyed their assessments and solutions with great vigour and confidence. We had the sense of these young people stepping, for a time, into their role as community leaders.

### 2. About the Green Resilience Project

This community conversation was part of the Green Resilience Project, a Canada-wide series of conversations exploring and documenting the links between community resilience, income security and the shift to a low-carbon economy. Working with a designated partner organization from each community, the Green Resilience Project aims to create spaces in which a wide range of participants can talk through the links between climate change and income security, and identify possible next steps to build or maintain community resilience in the face of these challenges.

This Community Summary Report reflects what we heard and learned in our community's conversation. Each Project partner organization across Canada will be producing a similar report. In March 2022, the Green Resilience Project will produce a final report summarizing findings across conversations, which will be available to the public and shared with Environment and Climate Change Canada.

Funding for the Green Resilience Project is generously provided by Environment and Climate Change Canada's Climate Action and Awareness Fund. The Project is managed and delivered by Energy Mix Productions, Basic Income Canada Network, Coalition Canada Basic Income - Revenu de base, Basic Income Canada Youth Network, national experts and local partners

### **3. About the Centre for Local Prosperity**

The Centre for Local Prosperity (CLP) promotes local economic and climate readiness solutions for rural and local communities in Atlantic Canada. CLP organizes conferences and community working sessions, and conducts evidence-based studies that often lead to community implementation. We draw on examples throughout the world and right here at home. Our work builds strength through citizen, business and local government collaboration. We encourage broad-based, practical, innovative and experimental community development initiatives that lead to communities gaining agency over their future.

### **4. Why Lockeport Was Selected to Have a Conversation**

Lockeport Nova Scotia is a rural community with a population just over 500, located outside of any commuting distance to a major urban centre. Lockeport is a unique Atlantic coastal island town that is significantly exposed to climate change related ocean impacts since it is joined to the mainland only by a beachside causeway. Lockeport has a maximum elevation of 9 metres. To secure its future, the community must have broad-based, proactive sea level rise and storm surge adaptation measures, as well as energy, fresh water and food security measures adopted in a timely manner.

In addition to its high-risk exposure to ocean changes, Lockeport has been experiencing other significant impacts of climate change. These include storm related power outages, lack of rainfall and drought conditions, and related concerns about food security. For example, the recent depletion of domestic dug wells in the town has intensified climate change awareness. As an island community connected only by a sandbar, Lockeport could potentially be cut off from the mainland at any time. For this reason, energy and food insecurity issues need to be addressed. More needs to be done for local energy production and efficient use. Food insecurity is a significant negative outcome of climate change as some food growing areas can become unsustainable.

The sea has been Lockeport's economic lifeblood since 1762. The economy is primarily fishing based with supporting services – town hall, recreation centre, library, medical centre, drug store, town market, restaurants, outdoor performance venue, gas bar and hardware store. Economic diversification is also an issue due to longer term changes in ocean health and the strength of fish stocks. The measures described in this proposal will also assist greatly in stabilizing the long-term health of the local economy.

Despite these challenges, the town's residents remain optimistic and trust that Lockeport will still exist in 2100 and beyond. They recognize that the future of the community can only be "future-proofed" by proactively building high levels of resident, business, and government engagement in addressing the issues and risks facing the town.

The engagement process began in February 2019, when "*Future-Proofing Lockeport*" began as a broad-based community discussion group to address both near and long term issues related to climate change. The Future-Proofing Lockeport group has been seen as an excellent example of a rural at-risk community beginning to discuss ways to safeguard their future.

### Lockeport Faces Significant Threats

#### Natural Threats

- With projected sea level rise and storm surges:
  - Coastal assets and resources will be impacted by sea level rise including businesses, infrastructure, and buildings like The Beach Centre
  - Particularly, both sides of the causeway and access
- Seasonal changes
- Wells going dry

#### Economic Threats

- Lobster northern migration
- Saltwater intrusion
- Causeway failure:
  - Access for jobs, products, employers, 2017 Provincial stats: Lockeport fishery \$12.7 million
  - Increases social isolation and mental health challenges
  - Reduced access to emergency services, schools and supplies: food, medication, and fuel
- New initiatives developing a diverse & vibrant local economy might be hampered
- No dedicated climate change and economic staff person
- Vulnerable intersection at sea level supporting infrastructure and a Nova Scotia Power substation where a loss of electricity shuts down our wastewater and drainage system

### Lockeport Has Taken Action and Has Strengths to Build On

*Future-Proofing Lockeport* began as a broad-based community discussion group to address both near and long term issues related to climate change. The Future-Proofing Lockeport group has been seen as an excellent example of a rural at-risk community beginning to discuss ways to safeguard their future. This group, comprising about 30 members, has begun to meet with regularity over the past 18 months, with a 6-month interruption in 2020 due to COVID.

#### Lockeport has taken on a range of actions

In addition to the Future-Proofing Lockeport initiative, the Town has taken a number of important steps to enhance its resilience and sustainability:

- Participated in provincial and Atlantic studies on infrastructure vulnerabilities
- Restructured some vulnerable street sections and culverts and the trestle

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- Replaced the Sewer Treatment Plant berm
- Commissioned a causeway engineering design study – Recommended realigning and raising causeway across the back harbour - 2017 cost: more than \$1 million
- Initiated active transportation projects and installed LED lighting
- Participated in a climate change coastal erosion and vulnerability study
  - Assessed Lockeport's coastal vulnerability to erosion by storm winds and increasing water depths
  - determined coastlines and buildings vulnerable to erosion and inundation
  - suggested adaptation strategies
- Created Lockeport's Integrated Community Sustainability Plan (ICSP) and the Municipal Climate Change Action Plan (MCCAP)
- Created a salt marsh high school students and the Town monitored for 3 years when reinforcing an eroding road impacted fish habitat
- There have been community efforts to research getting electric vehicle charging stations in the town

### Lockeport Has Important Strengths and Assets

- There are strong community values in helping each other with small town values of considering neighbours.
- There's an attitude that people are resilient and adaptable.
- There's a strong sense of home and appreciation for the beauty of the area.
- New residents, energy, ideas
- We support local businesses which generate a tax base important to Lockeport's economic sustainability
- Natural beauty and tranquility, we're walkable and have Five different beaches, we're Environmentally friendly and are a home to some endangered species
- Presently the lobster industry is flourishing, we have large fishery employers and ice-free ports and harbour facilities
- Lockeport has a theatre, artists and musicians and we are steeped in history and tradition

## 5. About the Conversation Participants

*Based on the criteria provided to you by the Green Resilience Project, who did you choose to invite to your conversation and why? How were participants engaged or invited?*

Keen to include the opinions and insights of local youth, Lockeport resident and CLP board member Dayle Eshelby approached Terri Dean-MacNeil, a teacher at Lockeport Regional High School, about hosting a conversation with students from the school. Working closely with Terri, we managed to recruit a total of 31 students from grades 10, 11, and 12 — 23% of the entire student population of 137 — to join us for a conversation. We were thrilled to have this many students join us for this session, especially since it was the first day of the lobster fishing season, when many students were called upon by their parents to join them to set their lobster traps. In addition to Terri and the students, a number of other teachers were also present during the conversation, to provide facilitation support and join in the conversation.

## B. The Community Conversation

### 1. Location

The conversation was hosted in three classrooms and the library at Lockeport Regional High School.

### 2. Structure

We structured the conversation as follows:

Timing	Activity
15 minutes	Opening presentation by Dayle
10 minutes	Watched two short videos - one on <a href="#">Just Transition</a> , another on <a href="#">Universal Basic Income</a>
30 minutes	Students were organized into five discussion groups, were provided with a pre-drawn flipchart page with sections for each of the key questions, and a one-page handout with the four key questions. In their groups, the students worked through the questions, adding sticky notes to capture their thoughts.
20 minutes	Recess break
40 minutes	Students participated in a “carousel” breakout activity, where two members of each group stayed at their table to present their group’s answers, and the others rotated from table to table to hear from and provide feedback on the other group’s discussions.
10 minutes	The original discussion groups re-formed and discussed what they had learned during their breakout discussions.
40 minutes	One or two representatives from each discussion group presented the highlights of their

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	discussions to the combined group of students and teachers.
10 minutes	Dayle wrapped up the conversation with an invitation to the students to stay involved and to complete the online surveys.

### 3. The Key Questions

Informed by the conversations that CLP held previously in its one-on-one interviews and virtual sessions, we modified the questions slightly to invite more reflection on the role of income security in climate change mitigation and adaptation. We organized the questions under the following headings:

#### (Climate) Changes in the Community

- What kinds of changes are you noticing in Lockeport's environment and/or economy?
- Are these changes affecting you, your family or the community as a whole?

#### The Role and Impact of Income Security

Do you think income security can help Lockeporters deal with climate change in Lockeport? How so?

#### Other Ideas and Solutions

What are some ideas to help address the issues raised in question 1 around the changes/challenges regarding the environment and economy in Lockeport?

#### How to Move Forward

How do you think these ideas can be achieved? Who do you think is responsible for making these changes?





## C. What We Heard

The following notes are compiled from the flip-charted discussions that were held by the five student discussion groups. They are presented as they were recorded by the student participants (verbatim).

### 1. (Climate) Changes in the Community

“What kinds of changes are you noticing in Lockeport’s environment and/or economy? Are these changes affecting you, your family or the community as a whole?”

The participants were able to discern a clear link between a warming climate and various marine, coastal, fresh water, and economic impacts:

#### Warmer Weather

- Winters are milder (mentioned in all five discussion groups)
- Longer, hotter summers (mentioned twice)
- Changing weather patterns
- Temperature rise

#### Warming Ocean, Rising Sea Level

- Oceans are warming (mentioned by four of five discussion groups)
- Sea level rising / tides are getting higher (mentioned by all five discussion groups)

#### Marine/Coastal Impacts

- More and more severe storms and hurricanes (mentioned six times in five groups)
- Coastal flooding (mentioned twice)
- Lobsters and other fish are migrating (mentioned four times)
- Birds are migrating earlier and are getting injured (mentioned twice)

#### Fresh Water Impacts

- Wells are drying up (mentioned by all five groups)

#### Economic Impacts

- Increasing costs (mentioned twice)
- Reduced housing availability
- Fewer jobs
- Increased poverty

#### Bottom Line

- These changes are devastating to the local area

## 2. The Role and Impact of Income Security

“Do you think income security can help Lockeporters deal with climate change in Lockeport? How so?”

### Would Enable Better, More Sustainable Decisions

The participants clearly understood that a UBI would enable people to make better, more sustainable decisions, whether for the food they eat, the education they pursue, how they operate the local fishery, and live their lives:

#### Better Food, Increased Education

- UBI would enable people to buy more healthy food from local markets (mentioned by four of five groups)
- Would enhance educational attainment (mentioned by three of five groups)

#### A Safer, More Sustainable Fishery

- Less overfishing
- Not forced to fish in bad conditions
- Working less when inappropriate
- Better safety

#### People Could Live More Sustainably

- People could buy eco-friendly products
- It would enable us to move to solar / wind energy
- More people could afford to live sustainably, and use money in the right way

### Would Enhance Emergency Preparedness

Participants understood that a UBI would allow people to prepare for and deal with future crises:

- Afford emergency supplies
- Safety net
- Always have some money
- Always money to fall back on with UBI

### Would Reduce Poverty / Increase Prosperity

Participants identified a range of household economic benefits that could result from a UBI:

- Lower poverty rates
- Less unemployment
- Fewer children in foster care
- Better credit (higher chance of getting car or house loans)
- More money would be coming in
- People could be free to start their own business

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- Student debt reduced
- Fewer animals in shelters

### Would Enhance Wellness

Participants saw that a number of direct health benefits could result from a UBI:

- Better mental and physical health
- Better health care
- Fewer people in hospital
- Don't need to work as hard

### Would Allow More Time for Family, Friends, and Volunteering

Participants understood how a UBI would free people up to spend more time creating social connections in their homes and community:

- More time to spend with family and friends
- Give people more time to volunteer in the community
- More spare time for volunteering

## 3. Other Ideas and Solutions

“What are some ideas to help address the issues raised in question one around the changes/challenges regarding the environment and economy in Lockeport?”

### Speak Up!

Most participants saw an important role for public protest, debate, and political action

- Protest! (mentioned by three of five groups)
- Use social media to speak out (mentioned by two groups)
- Get in positions of power
- Get leaders to listen

### Active and Green Transportation

Shifting modes of transportation to more sustainable options was referenced by multiple groups:

- Encourage bike rentals / paths
- Reduce car traffic, increase bike usage
- Bus / shuttle

### Fiscal Measures

Participants' comments focused primarily on taxation and a UBI as measures that could help to shift to, fund, and support more sustainable behaviour:

- Tax the rich and big organizations (mentioned by three groups)
- UBI system for fishers / better than employment insurance (mentioned by two groups)
- Money they give should be for things they need

### Green Energy

Participants saw green energy as an important mitigation strategy:

- More green energy
- Solar panels (mentioned by two groups)
- Windmills

### Adaptation Strategies

Recognizing the vulnerability of the causeway, participants identified two different adaptation strategies:

- Possible bridge
- Let's have discussion about emergency boats and docks

### Economic Development Opportunities

Participants had a number of concrete suggestions for how to increase and diversify the town's economic base:

#### Eco-tourism

- Build a luxury resort
- Eco-tourism
- Recreational use for the ocean, appealing to tourism
- Hydro-powered ferry for tourists

#### Enhance the Beach Centre

- Make beach centre bigger (draw more tourists)
- We can purchase upgrades, drawing in tourist dollars
- Wifi from town at beach centre
- Add a seaside diner to the beach centre

#### Other Ideas

- Government needs to open more business
- Open more local stores, open up closed buildings (mentioned by two groups)
- Create more, higher paying jobs (mentioned by two groups)
- Begin helping people to make job transitions

### Community Development Opportunities

Participants offered a number of ideas about how to enhance the community services available to residents:

- Better use of the pavilion, the “Jello Tree” after school program, and other community programs
- Health clinic, services to support elderly older population
- More movie nights (to attract people from other towns)
- Build an affordable housing complex
- Offer more medical services
- Create a nature preserve
- Learn from and work with other communities

### Better, More Sustainable Choices

A range of other ideas were advanced by the participants, to encourage more sustainable livelihoods in Lockeport:

- Use less plastic (mentioned by two groups)
- Don’t litter, pick up trash (mentioned by two groups)
- Plant more trees to prevent erosion
- Garden!
- Stop deforestation
- Prevent causeway erosion
- Prevent overfishing
- Mindset changes over time
- Laws to protect the natural environment

## 4. How to Move Forward

“How do you think these ideas can be achieved? Who do you think is responsible for making these changes?”

### First Steps

Participants identified a number of different areas to begin the journey toward resilience:

- Educate yourself and peers
- Support local businesses (mentioned by three groups)
- Active transportation
- Conserve water
- Solar panels instead of shingles
- Aqua-tours on ferries
- Increase readiness for natural disasters
- Resolve unemployment (created by the pandemic)
- Lower the cost of living

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- More funding will be necessary
- Ask government to buy us windmills

### Who's Responsible

While “government” was referenced most frequently by the participants, this was balanced with the recognition that everyone (including youth) have an important part to play.

#### We All Have A Part to Play

- People need to step up
- Every citizen!
- Individuals (mindset)
- Communities

#### Youth Have a Role

- Our generation
- The kids can help fix it
- Younger people in government

#### Government

Government was mentioned six times by the five discussion groups, with one specific reference to town council

#### Other Potential Players

- Big companies
- China (pollution)
- Global community
- Responsible people need to be in charge

## D. What We Learned

### 1. Highlights

*Please summarize your perspective on the key points you listed in section two. Why were they important? Were they brought up frequently, met with contention, surprising to you or your facilitators, etc.? Was there a strong consensus on any of the key points? You are welcome to expand on any key points you find especially interesting.*

Perhaps the most compelling aspect of this conversation was the student participants' ability to integrate and contextualize the information we provided in the presentations and videos, and to come up with thoughtful, concrete recommendations. Further, there was an impressive degree of consensus regarding the root causes of the challenges faced and the solutions required to mitigate and adapt.

### 2. Developing Understanding

*To what extent do you think your conversation built a wider and deeper understanding of the links and synergies between community resilience, livelihoods, income security and the low-carbon transition? Please explain your response.*

- 1 - Not at all
- 2 -
- 3 -
- 4 -
- **5 - Very much so: The student participants' abilities to take on and work with the information presented was truly impressive.**

### 3. Increasing Awareness

*To what extent did participants demonstrate increased awareness of climate change and their own capacity for climate action? Please explain your response.*

- 1 - Not at all
- 2 -
- 3 -
- **4 - It's not clear what the students' awareness of climate was coming into this session, so it's hard to say to what degree their awareness was enhanced. Their awareness and understanding of UBI, however, was clearly improved, as most had never heard of the concept before.**
- 5 - Very much so

## 4. Building of Relationships

*To what extent were new relationships between community partners and conversation participants created and fostered? Please explain your response.*

- **1 - Not at all: As a closed session within the school that involved no community partners, it's unlikely that new relationships were created or fostered.**
- 2 -
- 3 -
- 4 -
- 5 - Very much so

## 5. Fostering Ongoing Discussion of Solutions

*To what extent did your conversation create opportunities to foster ongoing discussion of solutions related to climate change, income insecurity and community resilience? Please explain your response.*

- 1 - Not at all
- 2 -
- 3 -
- **4 - Based upon the enthusiasm and engagement that we observed, we think that an important door was opened with the participating students and teachers to a discussion about the role that young people might play in developing Lockeport's resilience and sustainability.**
- 5 - Very much so

## E. Next Steps

*In your opinion, what does the community need to do next in order to build or maintain resilience in the face of climate change and rising income insecurity?*

Lockeport needs a person who is paid to research and develop solutions to enhance climate and income resilience. In the absence of this person, it will be difficult to achieve the momentum required to make the substantial changes that will be required.

*Did conversation participants identify next steps for continuing the conversation, or continuing advocacy related to the topics covered in the conversation? What were they?*

Continuing this conversation within the school will require the support and approval of school administration. While we have yet to seek this out, it is very likely that we could secure it.

*As the community partner organization, do you have a plan for continued advocacy on the topics explored in your community conversation? Are you able to share your plan with us at this time, and whether or how conversation participants might contribute to that plan?*



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CLP and several members of the Town of Lockeport have a real interest in picking up on the renewed interest in this topic, which was originally created through the “Future-Proofing Lockeport” initiative. We will need to secure modest funding to carry forward.